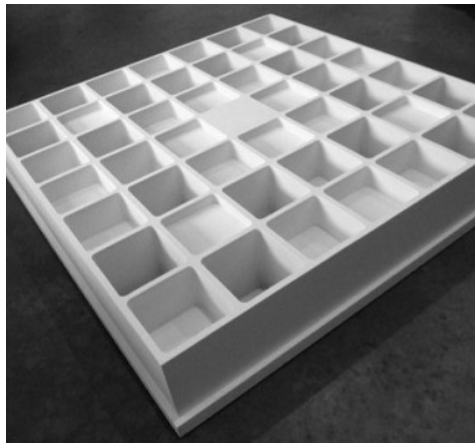


Prime7-2D™

Two-Dimensional Quadratic Residue Diffuser

AVL Systems' Prime7-2D™ Two-

Dimensional QRD's are a cost effective, lightweight, acoustical product that diffuses and backscatters sound uniformly from all angles of incidence. Its attractive design can be installed in any standard ceiling grid (tegular or flat mount) or to most any architectural wall or ceiling surface. This product's design is optimized with the use of quadratic residue number theory and computer modeling analysis, then precisely manufactured to provide desirable, two-dimensional diffusive scattering of returned acoustical sound energy.



Technical Features & Information

- Lightweight for Ceiling & Wall Installations
- White Textured Finish; Fabric and Colors Optional
- Thickness: 4"
- Sizes (Nominal): 23-3/4" x 23-3/4"
- Weight: 9 Lbs.
- Fire Performance Rating: Class A
- Ceiling Grid Mounting: "Drop-In" - Tegular or Flush Mount
- Wall Mounting: Wall Brackets

Finished panels are constructed of advanced impact-resistant, process-molded materials that prevent resonances and resist damage. The face has an attractive, lightly textured white painted finish that can be field-painted, if desired, or factory-faced with standard or customer-specified fabrics and finishes. Products are supplied to standard sizes as specified and are ready for installation with attachment devices to existing walls or in standard grid ceiling systems.

Applications

AVL's Prime7-2D™ diffusers are ideal for rooms and spaces that require an effective, lightweight, acoustical product that diffuses and backscatters sound where noise control is a consideration. The design of these products allows the specifier to provide uniform broadband diffusion in all directions to help scatter and blend the sounds in the room for the listening enjoyment of both music and speech. These functions help performers hear themselves with others and serves to improve clarity and tonal separation for voice, music and performances.

Interactive Product Performance

The Prime7™ family of interactive performance products is designed to provide the acoustical engineer and specifier with a complete "toolbox" of technically compatible products for any application. These engineered products can be used individually or as an interactive system, working together to optimally enhance the interior design, functionality, and acoustics of the architectural space. AVL Systems, Inc. is pleased to offer a full range of standard and custom architectural acoustical products for virtually every application and technical requirement.

Acoustical Performance (ASTM C 423)

Frequency (Hz)	125	250	500	1K	2K	4K
Prime7-2D™ - Absorption Coefficients	0.14	0.13	0.15	0.22	0.14	0.15

Diffusion Performance

Unlike sound absorption testing (ASTM C423) and sound transmission testing (ASTM E90), a standardized test for sound diffusion does not exist in the American Society for Testing of Materials (ASTM) standards. The Audio Engineering Society has suggested a test for diffusion characteristics (often performed using scale-models) that was largely developed by a manufacturer for their own products. This informational document AES-4id2001 has not been adopted by a standards organization for use and therefore does not present a verifiable reference for the comparison of products. There is no standard for the actual test or methods, or the results which are the product of each manufacturer's individual interpretations and application of the test procedures. The science of diffuser design and its standardized mathematical computations yield performance predictions and those are shown here for this product.

Warranty

AVL Systems' *Limited Warranty* extends for TWO FULL YEARS from the original date of shipment. AVL Systems' literature, presentations and published data are correct to the best of our knowledge at time of publication. AVL Systems, Inc. reserves the right to change or amend any of the products or the information presented or published without liability or notice.



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